SANDIA CORPORATION

LAB NEWS

PRIME CONTRACTOR TO THE ATOMIC ENERGY COMMISSION / ALBUQUERQUE, NEW MEXICO / LIVERMORE, CALIFORNIA

VOL. 18, NO. 2, JANUARY 28, 1966

SECURITY AWARDS—Ten Sandia Directorates achieved honors in 1965 by having no infractions, no misplaced documents. A large plaque listing the organizations will be displayed in the President's conference room. From left are W. R. Rosenberg, manager of Security Standards and Operations Department 3240; D. S. Tarbox, Director of Security and Industrial Relations 3200; and Sandia President S. P. Schwartz.

Ten Directorates Honored For Flawless Security Records

Ten Sandia Directorates were honored last week for security achievements during 1965. The organizations completed the year without security infractions and without misplacing a classified document.

Organizations 3100, 4200, and 6000 headed the awards list with the completion of three years without a security infraction. Organizations 2400 and 4100 completed two-year periods without infractions.

Completing one year were Organizations 2100, 4300, 4500, 5500, and 9400.

The year 1965 saw the best record compiled since the Sandia Infraction Program was originated in 1952 by Security Standards and Operations Department 3240. The formal program has established security procedures for Sandia operations and breaches in the procedures are reported as infractions. These records form the basis for making the security achievement awards.

Each year has seen an improvement in the record over the previous year.

"The trend has been established," Sandia President S. P. Schwartz said, "and the record continues to improve. This is good. However, security depends on people and Sandia employs 8000 people. All of us must continue our security awareness. I'd like to see this honor list grow—many more organizations should be on it next year."

Sandians Participate In Cosmic Rays Study

Thirteen Sandians will participate in a scientific expedition to study cosmic rays over the North Atlantic magnetic equator area. The study will be made from an NC-135A jet aircraft flying from Piarco Airport in Trinidad next month.

Two NC-135A aircraft will be involved in measuring the distribution and intensities of cosmic rays simultaneously over wide ranges of latitude, with special emphasis on deviations around the equator.

The research groups on both planes will work as one team. As the second plane, containing Los Alamos Scientific Laboratory equipment, is exploring cosmic ray deviations in the region of the South Atlantic magnetic anomaly, the Sandia plane will be making identical measurements in the corresponding area over the North Atlantic.

Both aircraft will also chart the latitude effect on cosmic rays from the geomagnetic equator to about 60 degrees north and south, passing through corresponding northern and southern latitudinal points at the same time. Experimenters on both planes will gather data in the same manner so the findings can be compared for temporal and spatial coincidences in fluctuations of cosmic ray flux.

Cosmic rays, which are sub-atomic bits of matter that continually bombard the earth's atmosphere from outer space, are of interest to scientists. Inter-action of the electrically charged particles with atomic nuclei in the atmosphere results in secondary radiation which can be detected at aircraft altitudes.

Because the primary particles carry an electrical charge, they are deflected in the earth's magnetic field. They are more numerous at the earth's poles than at the equator.

Availability of the instrumented aircraft makes it possible to obtain data on the effects of latitude on cosmic rays at elevations where the atmosphere is relatively thin—up to about 35,000 feet.

The two aircraft also participated in cosmic ray studies en route to and from the solar eclipse scientific expedition in the South Pacific area last May.

Following the eclipse study, the Sandia aircraft flew from Avalon Air Force Station near Melbourne, Australia, to a point near the south magnetic pole for additional cosmic ray studies.

Equipment aboard the Sandia aircraft for the upcoming expedition will include a neutron detector, moderated neutron counter, and a meson detector. J. E. Keith, Aerospace Sciences Division 5234, is the experimenter and scientific advisor for the Sandia expedition.

H. E. Viney, manager of Nuclear Test Department 7250, is the aircraft mission deputy; and T. B. Cook, Jr., director of Nuclear Burst Physics & Mathematical Research 5200, is the scientific deputy.

Aircraft mission coordinator is J. A. Williams, supervisor of Diagnostic Aircraft Section 7255-2. Other Diagnostic Aircraft Operations Division personnel aboard the Sandia aircraft include D. R. Lewis, P. B. Vandenburg, H. F. Sisson, W. L. Bierly, H. F. Ward, M. C. Frettem, D. A. Mayhew, and L. B. Neeley. J. C. Hays and W. B. Pafford are alternates.

A. F. Huters, supervisor of Diagnostic Aircraft Operations Division, will be the Sandia representative aboard the LASL aircraft.

Both aircraft are scheduled to leave Albuquerque on Feb. 9 for Port-of-Spain in Trinidad, which will be home base for the Sandia plane. Several flights will be made from the Trinidad base to study cosmic rays over the Atlantic in the vicinity of the equator. On Feb. 17, the Sandia plane will fly north along the magnetic meridian and land at Westover AFB in Mass. It will leave Westover on Feb. 19 on a flight north to about 60 degrees latitude, which is in line with the southern tip of Greenland, and will return to Albuquerque that same day.

Sandia Receives Assignment On Space Isotope Power Program

Sandia Corporation has been selected to provide technical direction for the Atomic Energy Commission's rapidly expanding space istotope power program—a program to develop radioisotope-fueled power systems for space missions.

According to an AEC announcement, Sandia's broad technical competence will be used to strengthen the Commission's management of its expanding activities in the space isotope power area.

Sandia's new responsibilities in the program include technical review of space isotope power component and system designs; environmental and field testing; preparation of technical requirements; establishing quality standards, and reliability evaluation.

In addition, Sandia will also conduct technical investigations to provide direction for future power systems. This work will utilize the capabilities of American industry as well as Sandia's in-house competence in certain technical fields.

Isotopic generators are being used to provide auxiliary electrical power for a variety of space vehicles. It is anticipated that other isotopic devices will power lunar space probes, communications and meteorological satellites, manned spacecraft and other space systems.

Radioisotopic thermoelectric generators use the process of radioisotope decay to produce thermal energy which is converted to electrical power.

Sandia's responsibilities in the program will be centered in a new department to be formed about Feb. 1 under A. Y. Pope, director of Aero Projects 9300. The department will be staffed by an initial nucleus of about ten employees who will be transferred from other laboratory groups. This number will be increased to approximately 30 by the end of the year through additional internal transfers.

Laboratory facilities, such as environmental testing equipment, will be used in the new program. No additional facilities, except those already planned or under construction, are anticipated for the isotope power program.

Sandia has been the AEC's prime contractor for Aerospace Nuclear Safety since 1962. As part of this program, the laboratory has conducted safety evaluation programs, including ground tests and two reentry flight demonstrations, on isotopic generators and nuclear power sources for space use. The new assignment adds another dimension to Sandia's role in the area of nuclear power sources for space.

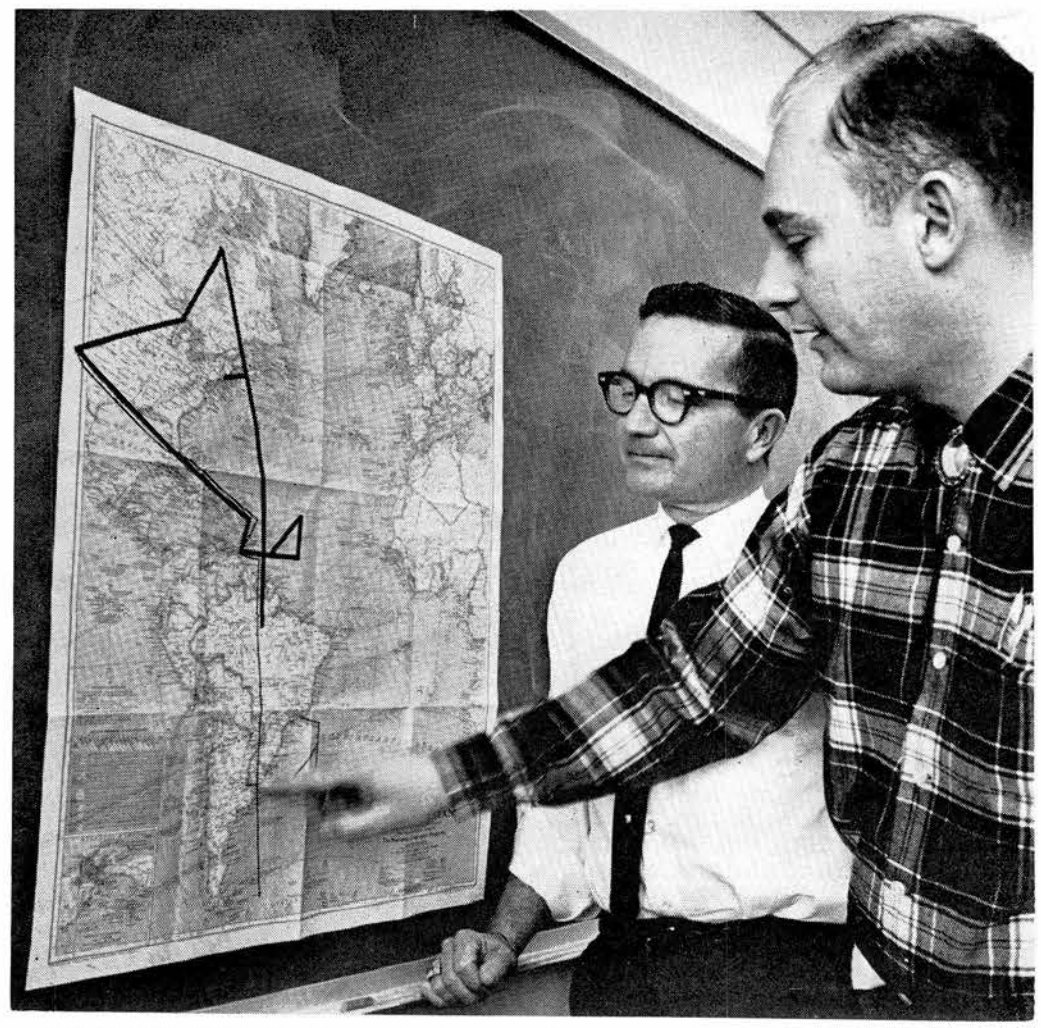
On matters pertaining to the space isotope program, Sandia will be responsible to AEC's Division of Space Nuclear Systems.

AEC will continue to look to industry for the development of isotope power systems for space missions and for development of the major portion of the advanced technology for such systems.

Mound Laboratory, Miamisburg, Ohio, provides some of the heat sources used in the space isotope program. Part of the AEC's Albuquerque Operations (ALO) complex, Mound is operated by Monsanto Research Corporation.

The Albuquerque Operations Office will be responsible for administering the industrial contracts for which Sandia will provide the technical direction.

Transfer of contract administration and technical direction of development work now under the AEC's New York Operations Office to ALOO and Sandia respectively is expected to take at least six months.



AIRCRAFTS' ROUTE—Checking paths that two planes are to fly during cosmic ray expedition next month are (left) T. B. Cook (5200) and J. E. Keith (5234). The heavy black line shows the route of the Sandia aircraft and the lighter line marks the approximate path of the second plane which will contain LASL personnel and equipment.

Editorial Comment

In this age of anxiety tempers wear thin. There are many, many "little" things which may cause us to go home and kick the cat. One source of frustrated anger is the abuse our cars may helplessly receive while parked during working hours.

Scratches from a car door carelessly opened. Minor dents from another driver's sloppy parking technique. Outside rear-view mirrors pushed askew or damaged. All of these contribute to the total of daily irritations.

But happily, we need not abandon all hope when entering our cars into the Sandia parking areas.

A recent case in point involved Gerald Phaklides (2421), who discovered his outside rear-view mirror had been damaged in the parking lot. However, a note on his windshield asked him to call Archie Lackey (7267). Jerry called Archie who apologized for the damage and offered to have the mirror repaired. The next day when Jerry left work, he found that the damaged mirror had been replaced with a new mirror.

Other common but undocumented incidents which reflect the courtesy and consideration of Sandians are the countless car windows that are rolled up by non-owners when an unexpected rain storm strikes, and the headlights that are turned off by others after a dark morning's drive to work. When the car is locked, there's usually a call to Security to locate the owner via the Base decal and inform him that his headlights were left on. Similar calls are made to notify a car owner of a flat tire.

To Archie Lackey and to the others who roll up windows and turn off head lights, we offer sincere thanks and recognition for removing at least one source of tension and frustration.

CHESS PIECES in the form of Kachina dolls were carved by Vonna McCloskey (2213-4). The supernatural beings depicted here are (front to back) Crow queen, white queen; black ogre, black king; paralyzed Kachina, black knight; and Zuni rain priest, white bishop.

Carving Chess Pieces in Form of Kachina Dolls Big Undertaking

The origin of Kachina dolls, made by the Hopi Indians of northeastern Arizona, is lost in legend, but the carved figures have a highly important role in the Indian's life.

The brightly painted and intricately decorated dolls represent the masked impersonators of supernatural beings (Kachinas) who appear in religious dances. The total number of Kachinas is believed to exceed 250 and each has a name, special features, and many human qualities. The Kachinas may be benevolent or feared, but are never worshipped by the Hopis.

Hopi children receive the dolls as a means of identifying each Kachina. The figures are customarily hung from a wall or rafter, although it is not considered wrong for a child to play with one.

As an example of native art, Kachina dolls are a popular collectors' item. One of these collectors is Vonna McCloskey's husband Paul. Since he also likes to play chess, Vonna decided to make a set of chessmen in the form of Kachina dolls as a Christmas present. She is a draftsman in Design Definition Section C IV, 2213-4, and had no previous experience in the art of woodcarving.

The Hopis use a penknife, chisel, wood rasp, and sandstone or sandpaper to work a solid block of cottonwood root. Vonna also used simple tools on her blocks of pine.

It was a project not to be undertaken lightly. "I figure I spent an average of two hours every day for four months. The final carving took the longest," Vonna said.

The 16 major chess pieces are based on Kachinas depicted in Harold S. Colton's reference book, "Hopi Kachina Dolls, With a Key to Their Identification." The 16 pawns are thick wooden discs with the top surface painted black or white.

Vonna used white latex house paint for the base coat on the figures, then mixed her own colors for the decorative trims. "I tried to match the soft colors found on old Kachinas rather than the brighter hues of regular poster paints," she explained.

Friends and co-workers were helpful in contributing materials for the trim: pieces of mink for tails or neck ruffs; pheasant, duck, and parakeet feathers for head decoration. The finished Kachina chess pieces are six inches high.

Use FTS for Long Distance Calls—It's Easy and Convenient

Although we live in a constantly and rapidly changing world, many of us are still reluctant to change our routines and habits. Even in such a prosaic thing as the use of the telephone, we may cling to what we think of as the "easier" way to place a call —the way we're used to.

However, Sandia is now part of the Federal Telecommunications System (FTS), and it is extremely important that we place long distance calls through this system rather than through tieline or the commercial telephone system.

FTS was initiated as part of the Federal government's cost reduction program. The system is leased from commercial telephone companies, and is limited to official government business calls.

For several months GSA (General Services Administration) will be checking the number of calls made by Sandia through FTS. During this survey the GSA-FTS operator may ask for your agency code. Sandia's agency code is 69. Eventually, when tieline facilities are discontinued, the number of access lines made available to Sandia will be determined by this GSA survey.

The use of FTS is clearly outlined on Page 2 of the November '65 Sandia Corporation Telephone Directory, and complete listings of AEC net offices and phone numbers are contained in the FTS directory which has been distributed to all supervisors.

To use FTS you simply dial "7" (this connects your phone with the FTS net), dial the area code, then dial the number of the office or person you are calling if the number can be reached by direct inward dialing. Or, if the plant does not have direct inward dialing (e.g. Livermore Laboratory), dial the plant's number and give the operator the desired extension. To call offices not on the FTS net, dial "7", the area code, and the FTS operator's number in the city you are calling. You then give the phone number you are calling to the FTS operator, and she will complete your connection. (FTS operator's numbers for all locations are listed in the FTS telephone directory.)

GSA made a traffic survey of the FTS network and established the "busy" telephone hours in each of the four time zones. These hours are listed in the FTS directory and in the Sandia directory (page 3). You are urged to plan your calls to avoid these busy hours; however, should you have to place a call during these hours, you are asked to try FTS first. If it is impossible to complete your call after several attempts, you may then use tieline facilities. If your call is not served by tieline facilities use the commercial telephone system—keeping in mind that we can realize the savings possible with FTS only if we minimize the number of toll calls made.

Should you have any difficulty using FTS, you may call the FTS coordinator at Sandia, tel. 264-2908.

Annual Edison Day Student Tour Set For Friday, Feb. 11

About 150 science students from Albuquerque and surrounding area schools will be visiting Sandia Laboratory Friday, Feb. 11, for the annual "Science Youth Day" in honor of Thomas A. Edison. This year's tour will mark the 10th year that Sandia has participated in the program.

Students and sponsors from 38 schools (27 Albuquerque public, private, and parochial junior high schools and 11 junior high schools in towns around Albuquerque) have been invited to attend. The tour will start at the Sphere of Science to see exhibits, hear a talk, and view "The Sandia Story" film; followed by visits to the radiography lab, machine shop, scientific glass shop, and environmental health laboratory.

J. N. Johnson, supervisor of Community Relations Division 3433, will welcome the students to Sandia. O. M. Stuetzer, manager of Technical Physics Research Department 5140, will present "Something About the World of Science."

ECP RESERVE FUND purchased this wheelchair for Leslie Calvin Ferrante of Dexter through the $101 allocated to the Muscular Dystrophy Association. Leslie is one of five brothers, all of whom are diagnosed as MD patients. Their mother is a widow.

Sandia and Livermore Laboratories Place in Fire Prevention Contest

Sandia Laboratory's fire prevention program ranked 13th in the 1965 contest sponsored annually by the National Fire Protection Association. Sandia was competing in the industrial division against 136 entries. Livermore Laboratory placed 15th in the division.

Last year, Sandia Laboratory ranked fifth in the competition.

Judging of the contest is made on the basis of the fire prevention program conducted by the organization as presented by entry forms and a scrapbook. Ray Cohrs (4544), Sandia's fire protection engineer, was responsible for the material in the scrapbook. Janet Jenkins of Technical Art Division 3463 prepared the scrapbook.

At Livermore Laboratory, H. V. McNabney of Health, Medical, Safety, and Industrial Insurance Division 8215 was responsible for the material in the scrapbook. It was prepared with the assistance of Publications and Graphic Arts Division 8233.

Crystal Growth Patent Issued R. A. Lefever

A patent has been issued on "Methods and Apparatus for Producing Crystalline Materials" which were developed by Robert A. Lefever when he was employed by General Telephone and Electronics Laboratories, Inc., in Palo Alto, Calif.

Mr. Lefever has about a dozen previous patents in the fields of crystal growth and chemical processing. He has been at Sandia two and a half years and is supervisor of Materials Research Division 5154.

The invention relates in particular to a flame fusion process in which crystals are prepared by controlled melting and recrystallization of an oxide. It provides new and improved apparatus for forming large single or poly-crystalline boules (suitable for use as masers, optical masers, etc.), which will not crack upon cooling.

The patent was issued Dec. 21, 1965, and is number 3,224,840.

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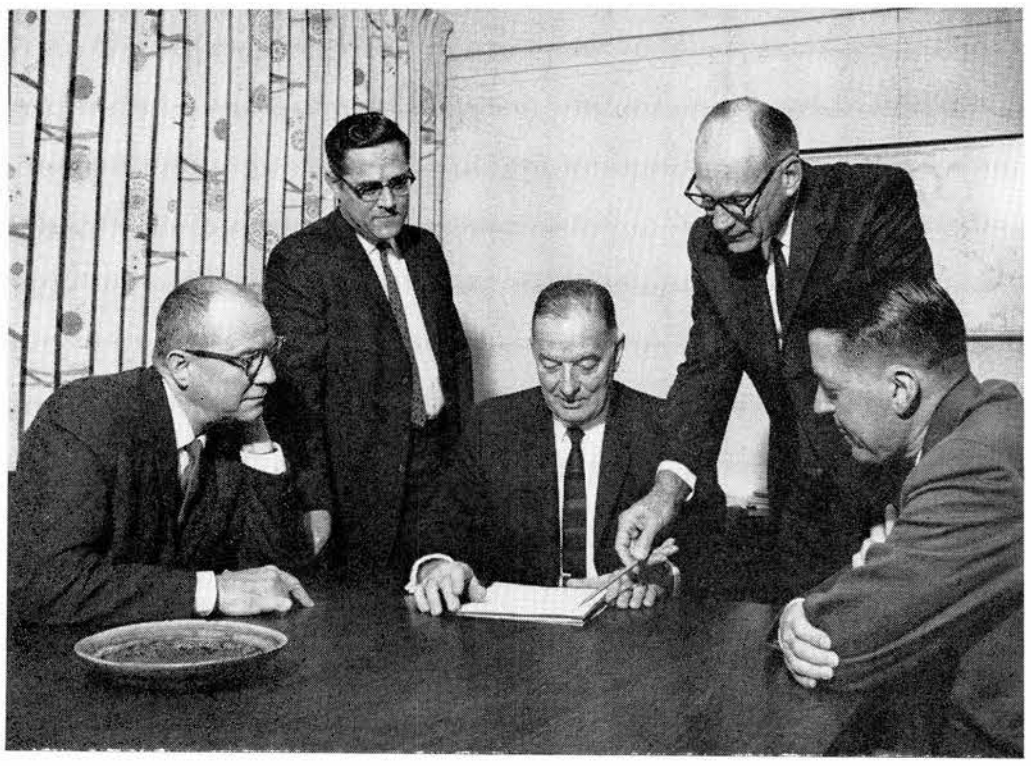


LIVERMORE LABORATORY VISIT—Informal discussions and briefings by various members of the 8000 staff were held when Sandia President S. P. Schwartz (center) and R. C. Fletcher, Vice President 5000 (right), visited Livermore Laboratory Jan. 5-6 to address a supervisory conference. Shown with the visitors are (l to r) C. H. DeSelm, Director of Staff Services 8200; L. Gutierrez, Director of Systems Development 8100; and B. S. Biggs, Vice President 8000.

LIVERMORE NEWS

Four Livermore Lab Employees—the Browns and Strandins—Tour Europe

Two Sandia couples, Cecille (8161) and Mel Brown (8142) and Lois (8230) and Garry Strandin (8154), have returned from their first trip through Europe with exciting reports about the places they visited.

"We loved every minute of the trip and all the places we went," each of them commented—but they all agree that their stay at the home of Garry's relatives in Finland was the highlight of their trip.

Garry had never met his great uncle nor his uncle's wife and two children, a boy 17 and a girl 15. They live about 200 miles north of Helsinki in the small community of Kauhava. Here, the four travelers enjoyed three and a half days of hospitality in a true Finnish home environment.

"We did encounter one obstacle, though," says Garry, "and that was communication. My relatives couldn't understand English and none of us could speak Finnish. To solve this problem during the day we used the bilingual dictionary along with sign language. In the later afternoons and evenings, a family friend and student from a university prep school served as interpreter. It was quite an experience!"

They also enjoyed the Finnish sauna bath for the first time. This is a steam bath, accompanied by light beating of the skin with birch or cedar boughs. Sauna baths are considered standard equipment in Finnish homes and are usually in a separate building from the home.

The group found the people very hard-working—and so warm and friendly. The scenery, with its tall, green pines, reminded Garry of his home state of Minnesota.

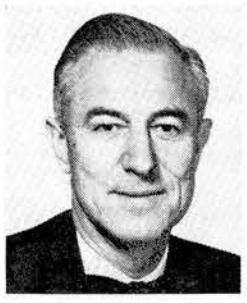
In addition to much sightseeing and wonderful food at many different types of restaurants, the women managed a good bit of shopping while touring. They were especially impressed with the lovely stores and outdoor shops in Germany.

Mel and Garry, both engineers, found the Deutches Museum in Munich most interesting. Located on an island in the Isar River, it is considered one of the largest technical museums in the world. Here can be seen German aircraft used during both World War I and II, including the first operating jet fighter, the ME 262.

The four feel that the five-day drive by "rent-a-car" from Munich to Innsbruck through the beautiful Bavarian and Austrian Alps was a memorable part of the trip. En route they stopped at Dachau, the Nazi concentration camp, and at Berchtesgaden, Hitler's country home.

CHECKPOINT "CHARLIE" at the Berlin Wall in Germany, the single control point in the American Sector for foreigners, members of the diplomatic service, and Allied forces, is visited by Sandians (l to r) Gerry Strandin, Cecille Brown, Lois Strandin, and Mel Brown during their European trip. Here American soldiers and People's Police of the Soviet zone face each other at the boundary between East and West Berlin.

Sandian to Speak At Safety Conference



G. L. Rhodes, supervisor of Safety Engineering and Environmental Health Division 8215, will speak at the Governor's Industrial Safety Conference to be held Feb. 3-4 at the Fairmont Hotel in San Francisco. As a member of a four-man panel in the Mineral Industries Section of the conference program, Mr. Rhodes will discuss, "Stopping Accidents Due to Unsafe Work Procedures."

The safety conference is called annually by the Governor of California for the purpose of developing new ideas and recommending action toward the reduction of industrial injuries and deaths in the state.

Some 1200 to 1400 executives who hold safety positions in union, industry, or government throughout California have been invited to the conference.

Noontime TV Series Offered at LRL

LRL is offering a noontime television series on communication skills for LRL and Sandia employees. The program is being shown on the Electronics Engineering Department's closed circuit TV monitors during lunch periods Tuesdays and Thursdays and will continue for 10 weeks—through March. 8. Presentations start promptly at 12:10 p.m. and last about 30 minutes.

Produced by the Television Department of the State University of Iowa, the series is of general interest to all employees. It provides instruction in language skills, with primary emphasis on speaking and writing.

Additional information, including location of viewing areas and specific topics to be covered in the series, is posted on bulletin boards throughout Livermore Laboratory.

Newcomers

Dec. 17 - Jan. 14

California
Stephen R. Burnam, Oakland 8252
Donna C. Cook, Walnut Creek 8243
James C. Gibson, Sacramento 8126
Floyd E. Lile, Stockton 8233
Alice M. Miller, Hayward 8243
Patricia Patterson, Livermore 8144
Dorothy E. Runnells, Castro Valley 8211
Minnesota
Roger E. Haaheim, Edina 8143
Oklahoma
Alvin F. Baker, Stillwater 8154
Oregon
Floyd W. Kent, Klamath Falls 8126
Washington
Paul H. Lasky, Seattle 8146
Returned from Leave
Joan F. Madsen, Livermore 8148

Wedding

Sandians Janet L. Bjorkman and Clyde Seibel were married Dec. 11 in an afternoon ceremony at the Church of the Nazarene in Livermore. After a church reception, the couple left for a week's wedding trip through Southern California.

Janet has been working in Secretarial Services Section 8211-1 since Nov. 8, 1965. Clyde, a draftsman in Electronic Design Drafting Section 8252-3, joined Sandia in July 1962.

The couple are residing in Livermore.

Livermore Notes

Eliott Dopking, Photography Section 8233-3, has been appointed to the City of Livermore's Beautification Committee. Consisting of five regular and four ex officio members, the committee was established in June 1964 by the Livermore City Council. Its primary purpose is to make recommendations for the improvement of city land presently owned and additional land as it is acquired, and to encourage private citizens in the upkeep of their property.

* * *

Enrollment is again open at Livermore Laboratory for programmed self-instruction study during off-hours. Beginning Feb. 7, eight math, six computer language, and six science courses are being offered.

Under this type of study program where self-teaching textbooks and materials are used, class sessions are more like supervised study halls than conventional classes. An instructor will be present to assist students, but there will be no lecture sessions. The student progresses at his own pace.

To enroll or for further information, contact SCLL training specialist W. L. Miller (8212), ext. 2402.

* * *

Joe Genoni (8232) shot a net low score of 66 to win the first place trophy in the Sandia Employee Golf Club tournament on Jan. 8. The straight handicap tourney was played at Spring Valley golf course in Milpitas.

Dick Komlofske (LRL) took the second place award. He tied with Joe for low net score honors, but lost the trophy on a hole-by-hole comparison of scores. Third place awards went to Mike Stephenson (8153) and Al Skinrood (8142) who tied with net scores of 67. A special award was won by John Barnhouse (8226) for coming closest to the pin at the No. 7 hole.

WINNING TEAM MEMBERS in the Sandia Twilight Golf League include (l to r) captain Smoky Maxwell (8244), "Mo" Houk (8253), Mike Lettrich (8243), Joe Buchler (8244), Ken Foster (8254), Leo Adams (8245), Bob Siglock (8251), and Vince Peterson (8222). Ten teams played in the nine-hole straight handicap league at the Springtown Golf Course on Wednesdays after work for 20 weeks.

Livermore Laboratory's Safety Record Topples

Livermore Laboratory's safety record tumbled recently due to an injury sustained by an employee while on the job Dec. 30, 1965. A very minor abrasion on the ankle was not immediately reported or treated and a serious infection resulted. The employee returned to work on Jan. 14 after several days of disability.

At the time of the injury, SCLL employees had worked 199 calendar days and 977,147 man-hours without a disabling injury.

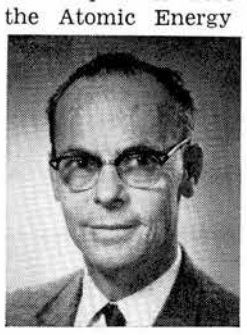
Congratulations

Mr. and Mrs. Tom Meagher (8148), a daughter, Keri Elizabeth, Dec. 31.

Mr. and Mrs. Miles Nelson (8117), a son, Joseph Michael, Jan. 7.

Mr. and Mrs. John Freie (8123), a son, Thomas Peter, Jan. 5.

Patents Issued on Radar Systems After Recent Declassification



Two patents were recently assigned to the Atomic Energy Commission in the names of C. W. Roeschke (2422) and L. J. Kabell (former Sandian) after being held in secrecy for more than 10 years.

This action follows the U. S. Patent Office practice of issuing patents on successful applications covering inventions whose original classification has been removed.

The application for the range indicating system invented by Mr. Roeschke was filed on Nov. 4, 1952, and upon issue received patent number 3,216,010. In explaining operation of the radar or sonar system, Mr. Roeschke said, "Distance from a transmitter to a reflecting object is indicated by detecting phase difference (i.e. the interval between modulation peaks) between the amplitude modulation on the transmitted and reflected signals. As the distance between the transmitter and the reflecting object decreases, the accuracy of distance measurement increases."

For example, with an earlier system you might have a distance measuring accuracy of plus or minus 50 feet when the reflecting object is 5000 feet away from the transmitter. You would have the same ±50-foot accuracy when the distance between the transmitter and reflecting object was 50 feet. This could present a problem. With Mr. Roeschke's system, the ±50-foot accuracy at 5000 feet would improve to ±½-foot accuracy when the transmitter and reflecting object were 50 feet apart.

The application for the second patent (the Roeschke-Kabell F. M. radar system) was filed on Jan. 12, 1954, and has now become patent number 3,217,322. Co-inventor Roeschke described it as "a very simple frequency modulated radar or sonar system. Triple frequency conversion is used for a high order of selectivity. This system does not provide a greater accuracy at closer distances, but does provide higher accuracy at greater distances."

Two previous patents have been issued in Roeschke's name, and two other classified applications have been judged "allowable," i.e. eligible for patent upon declassification.

The first patent on a declassified Sandia invention was for a bomb stabilizing structure invented by Charles E. Runyan (4220) and J. L. Kelley, formerly of the University of California, Berkeley. The patent application was filed on May 16, 1951, and was finally issued on Dec. 10, 1963. The invention related to improving the aerodynamic performance of bombs (or missiles) especially when dropped from relatively high altitudes and under varying conditions. The stabilizing features are still in use.

The Atomic Energy Act of 1946 specifically barred private patents with respect to the production of fissionable material and atomic weapons. In the 1954 revision of the Act, the issuance of any patent was forbidden on an invention or discovery useful solely in the use of atomic energy or of special nuclear material in an atomic weapon. Where there are uses other than in weapons, patent rights are forbidden to the extent that the fields of use set forth above are involved. When the discovery is generally useful in the field of atomic energy, the inventor is required to report the discovery to the AEC, or to file a patent application on it within 90 days. The Commissioner of Patents keeps the AEC fully informed of all applications in the field of atomic energy.

At the present time, 18 applications on classified Sandia inventions are on file in the U. S. Patent Office; 15 of these are already deemed "allowable." In Washington, "Q" cleared examiners in the Patent Office handle all classified patent applications. If there is any question whether or not the invention should be classified, the final decision is made by the Department of Defense or other agency using the device or familiar with the particular field.

The search and other patent procedures are the same whether an invention is classified or unclassified; however, when the U. S. Patent Office issues a "notice of allowability" to the inventor, there can be no further action on a classified application until it is declassified. Sandia reviews the status of all classified applications once a year, but declassification occurs mainly when the item or system is no longer in use.

Deaths

James P. Mahoney, supervisor of Receiving Division 4623, died after a sudden illness Jan. 13. He had been a Sandia employee since April 1948 and supervisor of Receiving Division since February 1950. He was 54.

Survivors include his widow; a son, Patrick; and a daughter, Cheryl, of Albuquerque.

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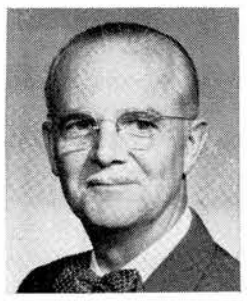
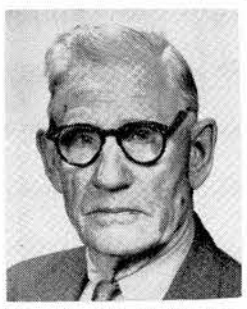


Thomas K. Kinsley, a retired Sandia employee, died Dec. 1. Mr. Kinsley had been with the Bell System 36 years (five of them at Sandia) when he retired Sept. 15, 1958. He worked in Piezoelectric Device Development Division while at Sandia.

Survivors include his widow of Sarasota, Fla., and a son, Francis T. Kinsley, of West Covina, Calif.

* * *



Walter J. Rediker, a retired Sandia employee, died in a local hospital Jan. 22.

He worked here 11 years and at the time of his retirement, Feb. 1, 1962, he was a stockkeeper in Division 4612.

Survivors include his widow, and two brothers in Kansas. Burial was in Minnesota.

Technical Library Women Help With SLA Plans; L. E. Lamkin Is Speaker

"Technical Research and Development Activities in New Mexico—A Glimpse at Two Current Programs" was the theme for a banquet last Friday during the Special Libraries Association national midwinter meeting in Albuquerque.

The speakers were L. E. Lamkin (7300), who discussed environmental testing programs at Sandia Corporation, and Louis Rosen of Los Alamos Scientific Laboratory, whose talk was on the proposed meson physics facility there.

The national SLA meeting was attended by presidents and presidents-elect of chapters throughout the country. The Rio Grande Chapter served as host for the banquet with arrangements handled by Calla Ann Crepin, Mary McClure, and Dolores Lanier (all 3421), secretary of the local chapter.

Congratulations

Mr. and Mrs. Floyd C. Elder (4516), a son, David Lee, Jan. 4.

Mr. and Mrs. C. R. Looney (2547), a daughter, Rebecca Paige, Jan. 12.

Sympathy

To Rose Cazier (1510 and 1540) for the death of her husband in a plane crash, Jan. 15.

To M. L. Shoemaker (1512) for the death of his wife in Albuquerque, Jan. 14.

To Arthur Costillo (4151) for the death of his mother in Belen, Dec. 1.

To Daniel J. Aquino (2553-1) for the recent death of his mother-in-law in Albuquerque.

To Dorothy (3462) and Jack Dempsey (4151) for the recent death of Dorothy's mother in Detroit.

To Basilio Villescas (4574) for the death of his father in El Paso, Dec. 20.

To Burke C. Duff and Arthur Cary (both 7233) for the death of their father and father-in-law respectively in Holtville, Calif., Dec. 21.

TUX TOO TIGHT? That's OK, Andy Carter (5613), you can wear the dark suit to the formal Black and White Ball at the Coronado Club Feb. 11. Most men do, while the ladies, like Mrs. Carter, will wear their formal dresses. Dinner starts at 7 p.m., dancing at 9. Call 264-4561 for reservations.

Las Vegas Night — Tomorrow, Club's Formal Ball — Feb. 11

A weekend in Las Vegas for two is the door prize offered tomorrow night at the Coronado Club. "Las Vegas Hacienda Night" gets underway at 8 p.m. and games are scheduled until 12. Elton Travis and his Swinging Westernairs will play for dancing from 9 to 1 and a snack bar featuring ham and turkey sandwiches will be open from 10 to 1. Winners will receive an expense-paid weekend at the Hacienda Motel in Las Vegas—room, meals, entertainment. Admission is $1 for members, $2 for guests.

The Club's annual formal dinner dance, called the Black and White Ball, is scheduled Saturday, Feb. 12. Steak dinner will be served from 7 to 9 p.m. followed by dancing to the Kenny Allen orchestra. Early reservations for this one are requested. Call 264-4561. Admission is $3.50 for members, $4 for guests.

Six Sandia Fires Cause $717 Damage During Year 1965

Six fires at Sandia Laboratory in 1965 resulted in a total property loss of $717, according to a report by R. W. Cohrs, fire protection engineer with Field and Plant Operations Engineering Division 4544.

During the past five years, causes of fires at Sandia Laboratory included the following:

1. Careless disposal of cigarette butts
2. Installation of improperly sized fuses in continuous operating equipment
3. Cutting and welding sparks igniting combustible materials
4. Loose electrical connections and resulting heating
5. Discharge of capacitor banks
6. Improper purging of hydrogen lines
7. "Lazy" pilots on gas-fired furnaces
8. Paper jamming in copying machines
9. Static electricity igniting pyrophoric metals or flammable solvents.
10. Ignition of spilled alcohol fumes by sparks from nearby electrical equipment.

In 1961, Sandia had eight fires for a loss of $1240; in 1962, 13 fires caused $4061 damage; in 1963, nine fires caused a loss of $661; and in 1964, 11 fires resulted in a loss of $279.

According to statistics compiled by the National Fire Protection Association, 12,000 people lost their lives in 1965 as a result of fires. Almost one-third of all fire victims in the home—about 2100—were children. Total property destroyed by fire in the nation was valued at $1,760,000,000.

"Fire is a constant danger," Mr. Cohrs said, "at work and at home. We must be continuously vigilant to prevent conditions which can cause fires."

Other Club Activities

Social Hours

Tonight the popular seafood buffet will be featured. Tommy Kelly's trio will play for dancing. Next Friday, Feb. 4, Sol Chavez and his group will provide the music. The chicken buffet ($1 children, $1.25 adults) will be served.

Charm School

Second class of the Coronado Club Charm School will start Feb. 8 and meet on Tuesday evenings from 6:30 to 8 p.m. through Mar. 15. Enrollment is limited to 20 daughters (12 to 16 years old) of members. A registration fee of $3 covers all six sessions. Mrs. G. C. Hollowwa, instructor, will emphasize good grooming, posture, and wardrobe.

Bridge

Coronado Club bridge activities are open to all members and their immediate families. No additional membership dues are required. Officers of the bridge groups extend invitations to any person interested to join the activities.

Ladies bridge meets on the first and third Thursdays of each month at 1:15.

The Bridge Club usually meets every Monday night at 7 p.m.

Additional information is available from John Nakayama (1513), president, tel. 299-8539.

Bowling

Anyone interested in the Coronado Club mixed league summer activities is invited to contact Lorraine Ericksen, tel. 298-2122. The league will bowl Tuesday evenings at 6:30 at the Lomas Bowl.

Paper Presented at Intl. Math Symposium

P. B. Bailey (5251) attended the International Symposium on Differential Equations and Dynamical Systems at Mayaguez, Puerto Rico, Dec. 27-31, and presented a technical paper.

His address was entitled "Existence and Uniqueness of Solutions to the Second Order Boundary Value Problems."

The symposium was jointly sponsored by Brown University and the U.S. Air Force. Meetings have previously been held in Mexico City and Boulder, Colo.

A paper bearing the same title, and co-authored by Mr. Bailey, L. F. Shampine (5256) and P. E. Waltman (former Sandian) is appearing in the January issue of the BULLETIN OF THE AMERICAN MATHEMATICAL SOCIETY.

Service Awards

15 Years


M. D. Adams, Jr.
3242


T. L. Barry, Jr.
4234


A. F. Beck
9213


Bertha Berger
4632


W. F. Bottoms
3242


H. E. Burrell
4517


H. V. Catt
6021


P. R. Chavez
4623


R. V. Crompton
3242


J. A. Deakin, Jr.
7261


Walter Dzugan
8212


M. D. Engle
2511


C. A. Fletcher
7335


W. E. Flowers
4213


W. G. Foy
7226


F. F. Gonzales
4631


E. D. Graves
7332


B. B. Griego
4212


J. A. Gurule
4573


L. C. Guynes
3451


M. K. Hamm
3463


W. J. Henderson
8211


J. B. Hiser
3242


A. R. Holmes
2412


Pat Homan
4512


W. D. Huff, Jr.
2411


J. E. Isoma
4221

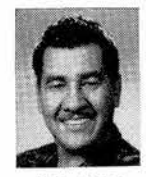

Moses Loretto
4573


M. B. Ludlam
3242

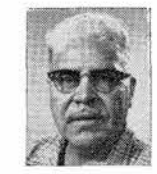

Robert Lynes
9413


E. E. Medina, Jr.
7335


M. W. McMullen
3242


C. A. Mieras
4573


J. L. Miller
4333


Guadalupe Mireles
4624


V. V. Montoya
3242


V. W. Moore
3242


L. B. Padilla
4575


Dorothy Pinkerton
4632


D. G. Pipher
7256

H. W. Pumphrey
9214

Norman Richardson
5234

J. P. Sanchez
4614

H. L. Smith
2511

J. R. Sublett
2560

Alma Vandevelde
2512

R. J. Walter
4371

J. M. Wiesen
1440

J. E. Young, Jr.
4253

G. J. Zimmerman
1523

10 Years

Jan. 28 - Feb. 10

L. B. Shew 2133, J. L. Hutton 7253, P. D. Scates 1442, W. W. Key 2126, M. G. Oberst 9233 Samuel McAlees, Jr. 9325, S. P. Bliss 3300, Virginia E. Barrett 2520, R. C. Moyer 2133, G. L. Smith 2211, B. L. Palmer 4221, R. D. Aden 5132, Muriel M. Iverson 7216, S. D. Carrillo 2552, R. J. Everett 3311, J. A. Lipham 1411, and H. W. Loemker 9211.

Sandia Speakers

R. P. Pardee (1133), "Moisture Dependence of Silver-Graphite Brushes in Air, Nitrogen, Helium, and Carbon Dioxide," IEEE Winter Power Meeting, Jan. 30-Feb. 4, New York City.

A. D. Bridegam (2223), "Digitizing—A Phase One Solution to Engineering Automation," Engineering Group Management Seminar, University of Southern California, Jan. 28, Los Angeles.

D. G. Kitzinger (9319), "Reactor Activation Caused by Generalized Power History," University of Arizona Nuclear Engineering Seminar, Jan. 10, Tucson.

L. S. Nelson (5234), "Studies of Condensed-Phase Microspecimens at High Temperatures with Intense Thermal Pulses," conference on Current and Future Problems in Chemistry at High Temperatures, Jan. 26-27, Rice University.

Albert Narath (5150), "Magnetic Properties of $CoCl_2 \cdot 2H_2O$ and $FeCl_2 \cdot 2H_2O$," National Magnet Laboratory, Jan. 5, Boston, and Yale University Physics Department, Jan. 7, New Haven, Conn.

C. J. McGarr (4600), "Computer Management Science in an Inventory Control System," Administrative Management Association, Jan. 25, Albuquerque, and Federal Supply Managers, Feb. 2, Washington, D. C.

J. A. Kenagy (4224), "Application of a Laminar Down Flow Clean Room to Dust and Fume Control in a Development Plastic Facility," American Association for Contamination Control, Rocky Mountain Chapter, Jan. 14, Albuquerque.

Events Calendar

Jan. 20—Trip into the Sandias on snowshoes. N. M. Mountain Club, leader Pete Skaates, tel. 268-4988.

Feb. 3-6 and 10-13—"A Streetcar Named Desire," Old Town Studio, 1208 Rio Grande NW, 8 p.m., reservations at tel. 242-4602.

Feb. 4-6 and 8-13—"Kiss Me Kate," Albuquerque Little Theatre, 224 San Pasquale SW, 8 p.m.

Feb. 6—Black Mesa, volcanic rock and sand dunes southwest of Los Lunas. N. M. Mountain Club, leader A. H. Zachmann, tel. 299-6871.

Feb. 6—Film "Young and the Damned" (1951 Cannes Grand Prize for Direction), plus discussion led by the film director's nephew, 7:30 p.m., Newman Center, 1815 Las Lomas Road NE, tickets at the door 50 cents.

Feb. 11—Community Concert series presents Hans Richter Haaser, pianist. Civic Auditorium.

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CLASSIFIED ADVERTISING
Deadline: Friday noon prior to week of publication unless changed by holiday.

A maximum of 125 ads will be accepted for each issue.

RULES

1. **Limit: 20 words**
2. **One ad per issue per person**
3. **Must be submitted in writing**
4. **Use home telephone numbers**
5. **For Sandia Corporation and AEC employees only**
6. **No commercial ads, please**
7. **Include name and organization**
8. **Housing listed here for rent or sale is available for occupancy without regard to race, creed, color, or national origin.**

FOR SALE

ELECTRIC RANGE, $70; 2 wing-back swivel rockers, $15 ea. Schafer, 299-2808.

'54 CHEVROLET Belair 6, AT, blue and white, $175. Elbert, 298-2204.

3-BDR. BRICK, carpet, FAH, custom drapes, walled yard, water softener, $14,200; '62 TR 4, all equipment, $1325. Wilson, 298-0049.

ROBERSON 3-bdr., 1¾ baths, dbl. garage, den w/fp, hw/floors, corner lot, sprinklers, AC, many extras, below appraisal of $19,400. Duvall, 299-8744.

'56 OLDS 4-dr. HT, one owner, all power, ARA-air, radio, Autronic light dimmer, extra snow tires, other extras. Walker, 268-5353.

7:10X15 4-ply tires, $8 and $2. Shepherd, 299-9066.

3-BDR. ROBERSON, living rm., fp., 1¾ baths, dbl. garage, carpet, drapes, AC, electric kitchen, dishwasher, landscaped. Taylor, 298-0426.

RENT OR SELL: 4-bdr. or 3 & den Snow home, 1¾ baths, dbl. garage, AC, carpeted, draped, patio, near schools-shopping, 10120 Norman NE, rent $135/mo., sell $16,000. Solano, 298-4606.

BRICK 3-bdr., den, has most everything, next to Pius campus and Winrock, best offer over $18,000. Halpin, 299-7710.

ANTIQUE cast iron banks; Winchester 1892 rifle, $45; trade for old hunting knives or Nazi daggers. Smitha, 299-1096.

ELECTRIC DRYER, GE model 720N, 220v or 117v, has new thermostat control and timer, rear vent, $30. Herndon, 268-8269.

'62 FORD Fairlane, one owner, 34,000 miles, 6-cyl., stick shift, '66 license, $800. Duncan, 299-2415.

MODERN LOUNGE CHAIR, charcoal grey, $25. Koetter, 268-1009 evenings.

REFRIGERATOR, 11 cu. ft. Coldspot, $35. Prentice, 299-4595.

STUDIO COUCH, brown, $20; Singer sewing machine, cabinet type, $12. Coalson, 298-8074.

PORCELAIN SINK, 33x22", double basin, strainer basket included, $6. Atkins, 298-5762.

'62 CHEVROLET PICKUP ½-ton, 4-spd. transmission, short, wide box. Comiskey, 268-5120 after 5.

SIMMONS COUCH, makes into a single bed, needs reupholstering. Cole, 299-9468.

HEWLETT PACKARD COUNTER, 5-digit readout, mod 521C, used only 40 hrs., $500. Svenson, 344-7700.

TOY POODLES, silver, male, AKC registered, excellent pedigree, 4 wks. old. Shipley, 298-2433.

NEW BARETTA 12 ga. shotgun, pump, 28" mod., silver pigeon grade w/recoil pad, $75. Bear, 298-2744.

STEREO speaker system in large walnut cabinet w/18 speakers, $50. Ryerson, 265-6260.

21" TV, cabinet model, w/rabbit ears and 3-speed turntable. Donner, 268-6534 after 5.

'65 SCOUT INTERNATIONAL, full cab, low mileage; RCA TV, 21", console. Pannell, 298-4136.

'64 DKW, one owner 1200 miles, $800. Silva, 256-1790 after 5.

LADIES COAT, size 16, wool and cashmere, $8; 2 men's suits, size 36, light tan, $15/ea; flute, new pads, $75. Fisher, 265-0626.

MOUNTAIN CABIN on Grass Mountain, 16' by 20' adobe, fireplace, elevation 8300', Forest Service land, $3000 cash. Weir, 299-1160.

3-BDR., 1¾ baths, Paulson custom home, hw/floors, FAH, extra large garage, landscaped corner lot, near schools and Los Altos Park, FHA appraisal, $16,500. Graham, 299-4871.

DINING TABLE, drop-leaf; china cabinet; occasional table, coffee table-hinged each end, all mahogany, leaf and pad, 6 Hitchcock chairs. Thorpe, 242-9441.

CUSHMAN maple table, 42" oval, ⅓ of table is a drop leaf. Klecotka, 299-8198.

3-BDR. HOUSE, NE Heights, new carpeting and drapes, garage w/dbl. drive, covered patio. Beller, 298-6649.

WESTINGHOUSE sandwich grill; 32 vol. Children's Golden Treasury Books and encyclopedias; Venetian blinds: 2 ea. 62x44", 2 ea. 44x44". Hamilton, 256-9755.

8-RM. HOUSE, 5 miles North of Belen on Highway 85, corner lot. Chavez, 256-6290.

'56 OLDSMOBILE, AC, all power. Komen, 3600 Espejo NE, 299-8881.

TYPEWRITER TABLE w/drop leaves and center drawer, $8. Huff, 256-9426.

'58 VAUXHALL 4-dr. wagon, $225 or best cash offer this weekend. Villella, 299-6261.

MAPLE CHEST OF DRAWERS; wooden high chair. Johnson, 256-3473.

BC-344-D receiver, 150 to 1500 KC, 4 bands, 92.5 KC I.F., 115 VAC, $30; size 5½ ski boots, $5. Berg, 299-5640.

STEREO six speaker system, two walnut enclosures 25"H 31"W 18"D, approx. ¼ of cost $128; Garrard auto turntable w/Shure stereo cartridge, $34, inc. base. Browning, 299-6384.

SMALL OXYGEN TANK w/regulator and adapter for large tank, $45; bed backrest, $4; foam cushion, $3. Hall, 256-7282.

SCANDALLI 120 base accordion w/airplane type case and folding music stand, $150. Merritt, 299-6630 after 7 p.m.

2500 SQ. FT., 3-bdr., 1¾ ceramic baths, walled, landscaped, lawns, sprinklers, near Bases, owner-financed; 200x235' adjacent lot, optional. Current, 268-4171.

'63 CORVAIR MONZA. Apodaca, 298-1288 after 5.

SET of Hollywood twin beds without headboard, $35; 3-piece sectional, foam cushions, $50. DeWitt, 299-4925.

BEIGE CANOPY COVER w/matching dust ruffle, quilted coverlet, drapes, and extra yardage; 2 pink headboards, twin size, 2 pink floral bedspreads. Thomas, 268-2565.

BOWLING BALL and bag; vibrator sander; 21" portable TV, 4 camper trlr. leveling jacks. McGarvie, 298-3364.

3-BDR. ROBERSON, 1¾ baths, hw/floors, central heat, AC, carpeting, drapes, fully landscaped, extra large lot. Clark, 299-6410.

BERNALILLO COUNTY LAND located on West Mesa 12 miles from Fourth and Central, $150/acre. Driscoll, 298-4641.

GE AUTOMATIC WASHER, $25. Puccini, 933 Madison NE, 255-0568.

10 FT. CAB-OVER CAMPER, $500; 1-ton pickup, dual wheels, $500. Sanchez, 344-0638.

TYPEWRITER, Royal portable; .32 auto. pistol; .22 auto. rifle; sell or trade for German items, coins, .45 auto., M1 carbine or other guns. Zaluga, 344-1564.

24" GIRL'S Schwinn bicycle, $20. Jones, 255-6190.

3-BDR., paneled den, fireplace, 2 baths, dbl. carport, $13,500. Butler, 299-5626.

3-BDR., den, 1¾ baths, dbl. garage, carpet, drapes, AC, sprinklers, $17,800 or assume. 3225 Britt NE. Cnare, 299-3604.

JIG SAW, 18" throat, w/motor, v-belt, $35; dinette, 5-piece, $35; portable Hi-Fi, needs electronic work only, $15. Oglesby, 344-6331.

ROYAL portable typewriter and case, year old, All-American model, $40. Scott, 299-3412.

3-BDR. MANKIN on large cul-de-sac lot, newly decorated and carpeted, AC, walled yard, near school, will refinance. Melvin, 298-6402.

BOXER PUPPY, cropped and innoculated, brindle female, excellent disposition and bloodlines, show quality. Bewley, 298-5728.

DOBERMAN PINSCHER puppies, AKC registered, champion and C.D. lineage, excellent temperament, Cundiff, 256-0043.

2-BDR., hw/floors, garage, walled yard, sprinklers, garden, pickup or car as down, under FHA. Baber, 344-1570.

CATTLE RACK, all metal, size 4'2½" wide x 6'4½" long, $30. Eaves, 299-7728 after 5.

FIVE LAMP FIXTURES, Early American w/metal shades, gold trim; 1 black, 1 ivory, cost $35 ea., want $16 ea. Jercinovic, 255-8027.

SKI EQUIPMENT: skis 6'8" and 6'10" w/safety bindings, $7.50 or both for $10; boots, 9-D, $3; metal poles, 46", $1.50; tire chains, 6.70x15, $5. Reynolds, 299-5157.

CRAFTSMAN 8" saw w/3/4HP motor; double kitchen sink, cast iron white w/all fittings; Tote Goat; boy's bicycle. Calvery, 255-9545.

'64 PONTIAC GTO convertible, automatic, PS, air, $2200. Woodley, 256-7300.

APT. SIZE REFRIGERATOR, freezer across top, $25; child's rocking horse, $3. Browne, 344-9675.

'61 CHEVY V8 Bel Air, AC, R&H, best offer. Moye, 243-0853.

'51 CHEVROLET ½-ton, deluxe cab, oak bed, R&H. Ruttle, 268-8080.

BEDROOM SUITE, Philippine mahogany (bleached) dresser w/mirror and bookcase bedstead for dbl. bed, $50. Eagan, 298-0196.

HOTPOINT automatic washer and Frigidaire electric range, both in operating condition, $25/ea. Freyermuth, 299-2053.

BICYCLES: Boy's 24" American Flyer and boy's 26" Hawthorne, $9/ea. Tiefa, 299-2763.

3-BDR HOME, walled, landscaped, sprinklers, electric kitchen, pitched roof, near schools, churchs, shopping, FHA app. $20,000. Adkins, 298-5041 after 5.

3-BDR. HOUSE, 1¾ bath, DR, utility-workshop, AC, dishwasher, alley, below appraisal, $13,200, 11508 Love NE. Kinney, 255-0414.

'52 JEEP station wagon, fwd, hubs, 6-cyl. engine, $395 or best offer. Netz, 282-3607.

MEN'S Hawthorne Medalist golf clubs, original carton, 2,4,5,7,9 irons, 1 and 3 woods, bag, balls, tees, wood covers, rainhood, $65. Conrad, 299-5316.

'63 FALCON wagon AT, AC, top rack, deluxe trim, large six engine, $1350. Whitney, 298-2809.

3-BDR. and DR NE home, fully carpeted, sprinklers, attached garage, low down or trade equity. Workman, 298-8201.

REFRIGERATOR, Gibson, 8 yrs. old, $35. Winkeljohn, 298-1592.

'60 BSA 250cc motorcycle, saddle bags and windshield; '55 Olds 88 Holiday sedan, PS, PB, AT, $150. Post, 298-0481.

PETERSON BABY STROLLER, $8; baby bathinette, $3; baby bed and mattress, $15. Greenwood, 298-5268.

BABY BED w/mattress and bumper. Colemon, 299-2377.

'58 PONTIAC. Roybal, 299-9647.

21" TV stereo combination, Silvertone, walnut cabinet, black and white. Miller, 256-2690 after 5:30.

RAMBLER, 4-dr. station wagon, ST, OD, 6-cyl., R&H, 37,000 miles, original owner, $1195. Ray, 256-6453.

'57 OLDSMOBILE 88, R&H, red and white, $175. Boyd, 247-9448.

'60 CHEVROLET Biscayne, white, 4-dr., 6-cyl., ST, R&H, new overhaul, brakes, clutch, $650. Guzman, 344-9287.

SELL OR LEASE: 3-bdr., den, pitched roof, hw/floors, AC, FHA app., landscaped, near schools, shopping. Coonce, 296-1089.

17" TV, needs some repair work, has new picture tube, $10. Wheeler, 256-6230.

WANTED

CLARINET, B-flat for beginning musician, reasonable price. Swain, 264-4498 after 5:30.

OLD BANJOS and guitars, will accept damaged but repairable instruments. Glover, 298-7302.

TENT TRAILER CAMPER. McCoach, 298-5960.

FREE TAPE RECORDERS for Albq. Tutorial Council, to be used in free tutor program at Canoncito School, etc. Roberts, 255-9527.

CONDENSER TYPE ENLARGER for 35mm. Caskey, 268-4724.

WHEEL for Volkswagen. Colemon, 299-2377.

FOR RENT

2-BDR. HOUSE w/water and lights, $55/mo. Schiess, 255-3252 after 4.

3-BDR., 1½ baths, garage, private backyard, carpets, drapes, water paid, $90/mo. for SC employee, 6105 Aztec Rd. NE. Bradford, 268-0980.

FURNISHED 2-bdr., automatic washer, AC, reduced to $87.50, near Sandia Base, 3 yrs. old, 8322 Trumbul SE. Villella, 255-7416.

3-BDR HOUSE, 1¾ bath, carpeting, stove, refrig., dbl. garage, walled yard, sprinklers, landscaped, 1 yr. lease desired, $135, near Base. Dunlap, 344-1007.

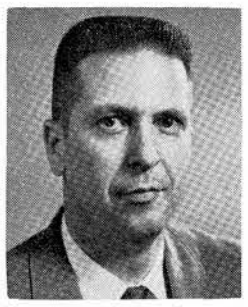
MOUNTAIN HOME in the pines, 2-bdrs., stove, refrig., piano, fireplace, dbl. garage, $135/mo. Linn, 282-3986.

LOST AND FOUND

LOST—Ladies black glove, ladies black knit glove w/leather palm, motorcycle key, gold cuff link, Sam's photo pack envelope, Briar pipe, Elgin wrist watch, 5 keys in blue leather case, rhinestone pin, black pipe, silver tie clasp, Kay Woodie pipe. Lost and Found, tel. 264-2757, Bldg. 610.

FOUND—Prescription glasses, blue eye shadow pencil, 3 keys on ring. Lost and Found, tel. 264-2757, Bldg. 610.

Supervisory Appointments

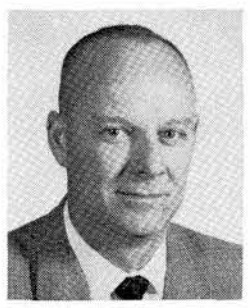


H. E. WALKER to supervisor of Components Reliability Division 2151, effective Feb. 1.

"Eddie" joined Sandia in September 1951. He worked in quality assurance until he was transferred to the reliability organization in 1959 where he has worked since that time.

Eddie went on active duty status with the U. S. Air Force in April 1943. He worked on the Manhattan Project at Wendover, Utah, and was discharged as a first lieutenant in December 1946.

He received his BS degree from John Brown University in 1943 and is a registered professional engineer in the State of New Mexico. He is a member of the Institute of Electrical and Electronics Engineers and American Society for Quality Control.



KENNETH E. FINDERS to supervisor of Plant Engineering Design Division 8254, effective Jan. 16.

Ken joined Sandia at Albuquerque in August 1951, where he was primarily in plant engineering design work. Since transferring to Livermore in January 1959, he has worked in all phases of plant engineering.

Previously, Ken was a mechanical engineer for the Bureau of Reclamation at Davis Dam, Ariz., for a year and a half.

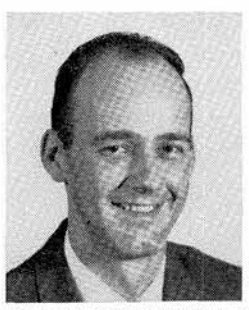
He received a BS degree in engineering from the University of Iowa in 1950 and is a registered professional engineer in New Mexico.

During World War II he served three and one-half years in the U. S. Army Air Corps.

GEORGE E. POWER to supervisor of Weapons System Evaluation Section 2126-3, effective Feb. 1.

George joined Sandia in February 1956. He was with the Systems Test Section at Clarksville, Tenn., until he was transferred to Quality Evaluation System Testing Section I at Pantex in Amarillo in August 1965.

George received his BS degree in economics from Austin Peay State College, Clarksville, in 1964.

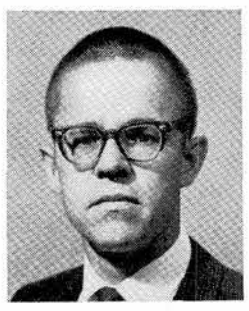


OTTO H. SCHREIBER to supervisor of Statistical and Reliability Division 8169, Product Engineering Department, effective Jan. 16.

Otto joined Sandia at Albuquerque in August 1957 and transferred to Livermore in June 1963. At both laboratories, he has been primarily concerned with reliability studies on systems and components.

Before coming to Sandia, he attended the University of Florida where he received his BS degree in electrical engineering. He is a member of Sigma Tau and Phi Kappa Phi honorary societies.

Otto served four years in the U. S. Navy.



RICHARD R. PRAIRIE to supervisor of Statistics and Computing Division 2153, effective Feb. 1.

Dick joined Sandia in August 1958 and worked in the statistics section of reliability until he resigned in August 1960 to complete his education. He rejoined Sandia in January 1962 and has worked as a statistician in the Reliability Department since then.

Dick received his BS degree from the University of Minnesota in 1955 and an MS and a PhD in statistics from North Carolina State College in June 1958 and June 1962 respectively.

He is a member of the American Statistical Association and Sigma Xi.

Welcome
Newcomers

Jan. 10-21

Albuquerque
- Floria S. Abe 3154
- Virginia A. Brautigam 3126
- James H. Gallegos 3415
- *Lillian J. McCullar 3154
- Munson D. Roberts 3126
- Lorella E. Salazar 3421
- Naomi J. Vance 4372

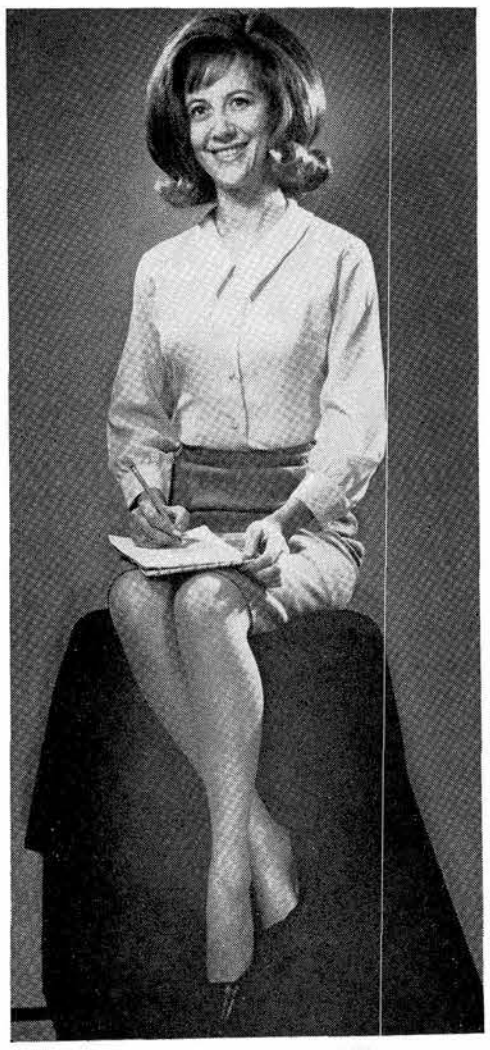
Florida
- Walling R. Crye, Jacksonville 2421

Illinois
- Masaru C. Nakaoki, Chicago 2452
- Dennis W. Shanfeldt, Chicago 5151

New York
- Richard C. Wayne, Ithaca 5132

Virginia
- John D. Ashworth, Newport News 3313

*Denotes rehire



Judy Scheihagen (3151)

Take A Memo, Please

When streets and sidewalks are slippery, take extra care. A few seconds saved by speeding or running on ice don't count if you fail to reach your destination.

ARTIST Joe Rivard displays one of his oil paintings. Another large canvas Joe painted was recently purchased for the permanent collection of the El Paso Art Museum.

Joe Rivard Oil Painting Purchased By El Paso Museum of Art

"Intruder," an oil painting by Joe Rivard (5223), hangs in the permanent collection of the El Paso Museum of Art. It was purchased recently by the El Paso Art Association, Inc., during the 10th Annual Sun Carnival Art Exhibit.

Joe had entered two paintings in the competition; both were selected from 540 entries to be among the 90 shown, and "Intruder" was awarded second prize and purchased separately for permanent display.

A mechanical engineer at Sandia working on reactor development, Joe first considered art for a vocation. He gave up commercial art to pursue engineering but is still a dedicated "Sunday painter."

In the accompanying photograph, Joe is displaying a painting which ably demonstrates his mastery of oil technique. This painting, "Chorus of Rocks," was completed about two years ago. At that time, he was primarily concerned with realistic portrayals and mood. Since then, he has become more concerned with the content or ideas presented in his painting.

"At one time, it was enough to paint a pretty picture," Joe says. "And pretty pictures sell well. I did technical exercises and experimented with media, but the work was not completely satisfying to me. Nowadays, I feel that an artist should have something to say or not bother to paint."

The painting in the El Paso Museum is a powerful statement of Joe's feelings. It depicts the boot-shod legs of an intruder upon the land. "No man really owns the land," Joe says, "even if he has a deed to it."

Joe has exhibited his paintings at the New Mexico State Fair and the New Mexico Arts and Crafts Fair. Many of them are in private collections in several states.

Take Note . . .

Have a tape recorder you no longer use? The Albuquerque Tutoring Council is seeking donation of such equipment to be used by volunteers at the Cañoncito Navajo Reservation.

R. W. Roberts (2422) is assisting in the program and has additional information. Call him evenings at 255-9527.

The Cañoncito reservation contains one of two bands of Navajos in New Mexico whose needs are administered by the United Pueblo Agency. The school is located about 38 miles west of Albuquerque, north of U. S. 66 on Laguna Star Route. Fifty-five students board at the school, and 34 others are day pupils. These children are all in the first three grades of elementary school; older children attend Federal boarding schools, mainly the Indian School in Albuquerque. Tutoring Council plans include helping the younger children with their homework in an evening study center.

* * *

The Albuquerque Longhouse of Y-Indian Guides installed the following officers for 1966: Leon Parrish (1542), chief; Rick Beasley (1514), medicine man; and R. L. Posey (7332), tallykeeper. Outgoing chief Norm Baker (2111) was elected to the Council of Sachems.

C. M. Clendenin (9411) received the Big Brave of the Year award for his service and dedication to the Indian Guides during the past 10 years. He was a charter member.

Purpose of Indian Guides is to foster companionship between fathers and their sons 6-10 years of age. It is affiliated with the YMCA Heights Branch.

* * *

The Technical Development Program (TDP) Wives Club invites the wives of past and present TDPs to attend a talk on Peace Corps activities in Latin America, Monday, Feb. 7. David Lightwine, a returned volunteer, will also show colored slides. The meeting will start at 7:15 p.m. in the hospitality room of Albuquerque Federal Savings and Loan, Wyoming and Menaul NE.

* * *

Dave Edelman (1442) will teach a course in the design of industrial experiments to be offered through the UNM Community College starting Feb. 10. The course will be sponsored by the Albuquerque Section of the American Society for Quality Control and will cover fundamentals of experimental design.

Registration will be Feb. 7-8 in Room 208, Administration Building, University of New Mexico.

Sandia's Safety Scoreboard

Sandia Laboratory:

39 DAYS
1,365,000 MAN HOURS
WITHOUT A
DISABLING INJURY

Livermore Laboratory:

26 DAYS
125,600 MAN HOURS
WITHOUT A
DISABLING INJURY